



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,382	10/05/2004	Frederic Noelle	37063	6500
116	7590	08/21/2007	EXAMINER	
PEARNE & GORDON LLP			VANATTA, AMY B	
1801 EAST 9TH STREET				
SUITE 1200			ART UNIT	PAPER NUMBER
CLEVELAND, OH 44114-3108			3765	
MAIL DATE		DELIVERY MODE		
08/21/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/510,382	NOELLE, FREDERIC
	Examiner	Art Unit
	Amy B. Vanatta	3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 June 2007.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 and 14-22 is/are pending in the application.
 4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.
 5) Claim(s) 1-9 is/are allowed.
 6) Claim(s) 10,11 and 14-17 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 October 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restriction

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

- I. Group I, claims 1-11 and 14-17, drawn to an apparatus (drum and production unit), method of producing a nonwoven material, and nonwoven material made by the process.
- II. Group II, claims 18-22, drawn to an apparatus for producing a nonwoven material.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature of Group I is a drum having a water-impermeable partition subdividing the interior of the body of the drum, forming compartments which are placed under partial vacuum. Group II does not share this special technical feature, but rather recites an apparatus including a first and a second conveyor, a broadly recited drum, and an aspiration device.

3. Thus, newly submitted claims 18-22 are directed to an invention that is independent or distinct from the invention originally claimed (Group I) for the above reasons.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 18-22 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

4. Applicant's election without traverse of Group I in the reply filed on 6/5/07 is acknowledged.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 10, 11 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 10, "the drawing of the material" lacks proper antecedent basis. It is unclear what "drawing" is being referred to.

In claim 11, line 4, "the spun tower" renders the claim indefinite since it is unclear whether this "spun tower" is the same or a different structure than the previously recited "spunbond tower".

In claim 17, line 4, "is less 1" is confusing. It appears that "than" should be inserted into the recitation.

Claim Rejections

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Oathout et al (US 2002/0116801).

Claim 14 is a product-by-process claim which claims a nonwoven fabric.

Product-by-process claims are not limited to the manipulations of the recited steps, but only to the structure implied by the steps:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

As set forth in MPEP 2113:

"The Patent Office bears a lesser burden of proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Regarding claim 14, Oathout discloses a nonwoven fabric treated by impingement with fluid jets in order to improve the isotropy of the web (see Abstract). Oathout discloses that the web which is treated with the fluid jets may be a spunbond web (see 0025 and claim 11). The resulting nonwoven web is isotropic with respect to strength (0004, 0053, 0058, and see Examples and Tables). Thus, the product of Oathout appears to be identical to the product claimed in claim 14.

10. Claim 14 is rejected under 35 U.S.C. 102(b) as being anticipated by Radwanski et al (US 4,879,170).

Claim 14 is a product-by-process claim which claims a nonwoven fabric. Product-by-process claims are not limited to the manipulations of the recited steps, but only to the structure implied by the steps:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985)

As set forth in MPEP 2113:

"The Patent Office bears a lesser burden of proof in making out a case of *prima facie* obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. *In re Fessmann*, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974).

Regarding claim 14, Radwanski discloses a nonwoven fabric which is hydroentangled and results in a web with isotropic strength and recovery in machine

and cross directions (see Abstract and col. 4, lines 32-44). Radwanski discloses that the web which is hydraulically entangled may comprise a spunbond web (see, e.g., col. 5, lines 60-64; col. 12, line 11). The resulting nonwoven web is isotropic with respect to strength (see, e.g., col. 17, lines 8-11 and see Examples and Tables). The product of Radwanski appears to be identical to the product claimed in claim 14.

11. Claims 15-17 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Oathout et al (US 2002/0116801).

Claims 15-17 are product-by-process claims which claim a nonwoven fabric. Product-by-process claims are not limited to the manipulations of the recited steps, but only to the structure implied by the steps; see paragraphs above.

Oathout discloses a nonwoven fabric treated by impingement with fluid jets in order to improve the isotropy of the web (see Abstract). Oathout discloses that the web which is treated with the fluid jets may be a spunbond web (see 0025 and claim 11). The resulting nonwoven web is substantially isotropic with respect to tensile strength (0004, 0053, 0058, and see Examples and Tables). It appears that various of the products described in the Examples and Tables of Oathout have a ratio of tensile strength in the MD to that in the XD as claimed in claims 15-17. Thus, the product of Oathout appears to be identical to or only slightly different from the product claimed in claims 15-17. Moreover, to the extent that the product of Oathout has slightly different tensile strength ratios than as recited in claims 15-17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select fluid

angles and pressures in treating the web of Oathout such that the resulting web has the claimed tensile strength ratios, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

12. Claims 15-17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Radwanski et al (US 4,879,170).

Claims 15-17 are product-by-process claims which claim a nonwoven fabric. Product-by-process claims are not limited to the manipulations of the recited steps, but only to the structure implied by the steps; see paragraphs above.

Radwanski discloses a nonwoven fabric which is hydroentangled and results in a web with isotropic strength and recovery in machine and cross directions (see Abstract and col. 4, lines 32-44). Radwanski discloses that the web which is hydraulically entangled may comprise a spunbond web (see, e.g., col. 5, lines 60-64; col. 12, line 11). The resulting nonwoven web is isotropic with respect to strength (see, e.g., col. 17, lines 8-11 and see Examples and Tables). It appears that various of the products described in the Examples and Tables of Radwanski have a ratio of tensile strength in the MD to that in the XD as claimed in claims 15-17. Thus, the product of Radwanski appears to be identical to or only slightly different from the product claimed in claims 15-17. Moreover, to the extent that the product of Radwanski has slightly different tensile strength ratios than as recited in claims 15-17, it would have been obvious to one having ordinary skill in the art at the time the invention was made to select fluid

pressures and other processing parameters in hydraulically entangling the web of Radwanski such that the resulting web has the claimed tensile strength ratios, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable range involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Allowable Subject Matter

13. Claims 1-9 are allowed.
14. Claims 10-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Amy B Vanatta
Primary Examiner
Art Unit 3765